FIGURE 1

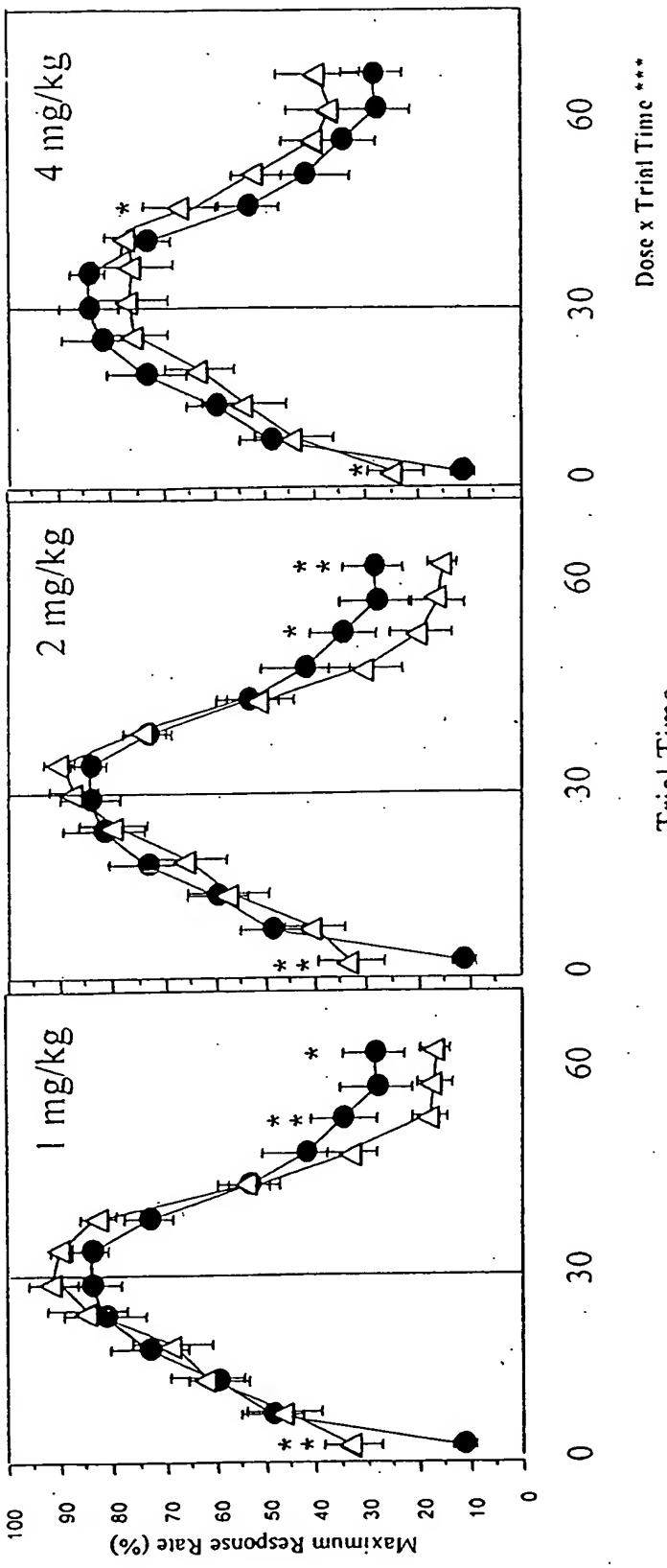
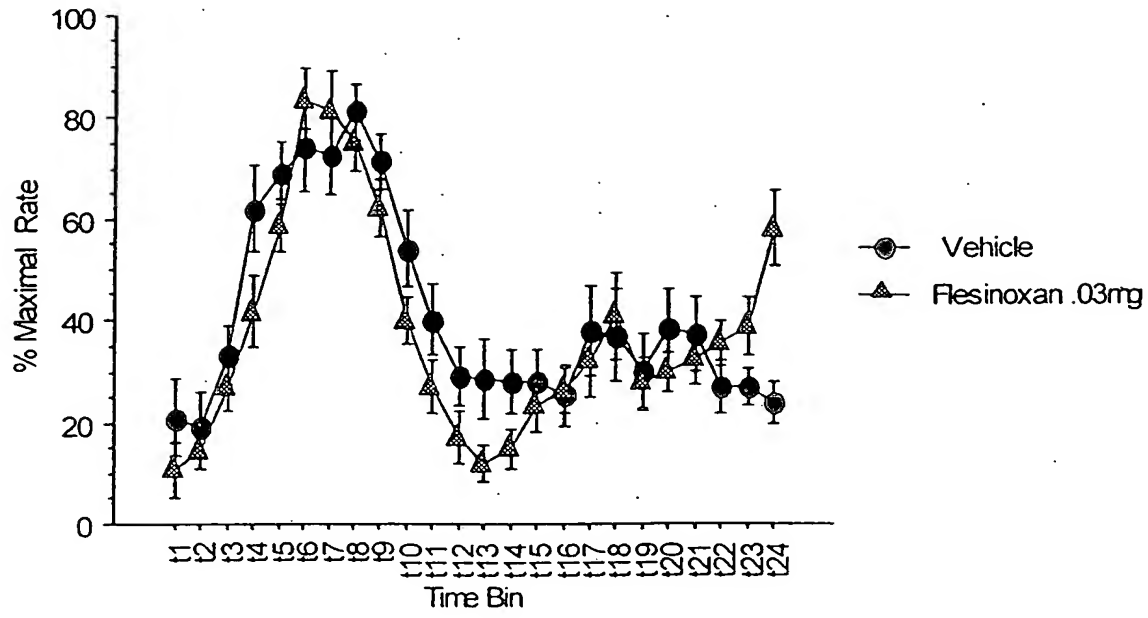

1A
1B
1C
1 mg/kg
2 mg/kg
4 mg/kg
Maximum Response Rate (%)
100
90
80
70
60
50
40
30
20
10
0
0
30
60
0
30
60
0
30
60
Trial Time
(sec)
Dose x Trial Time ***

FIGURE 2

2A



2B

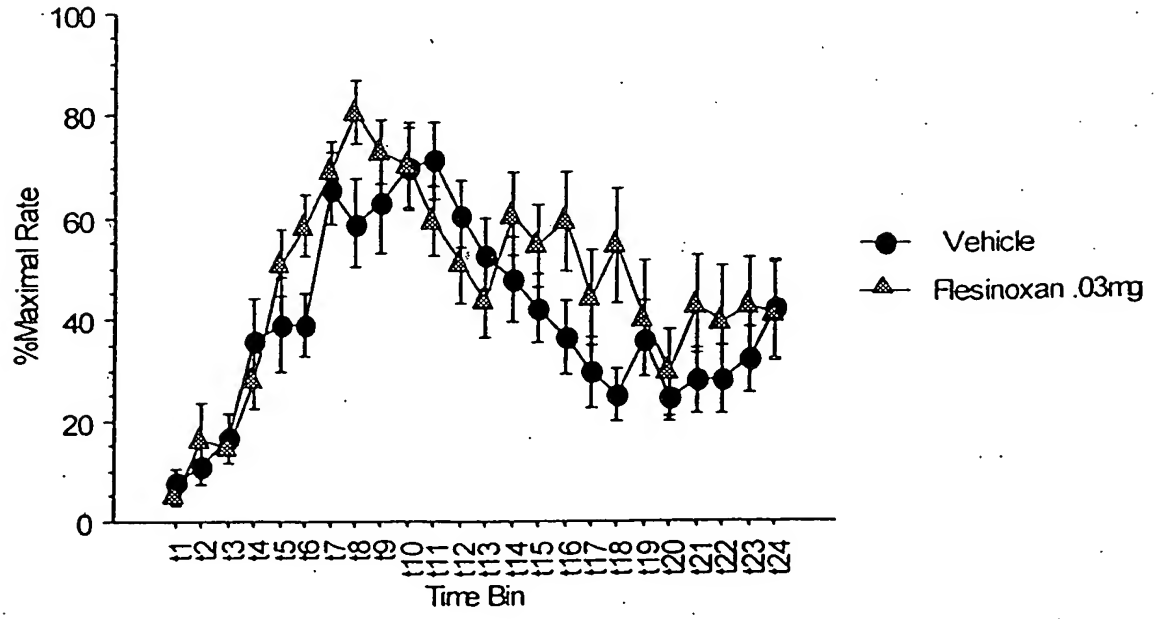
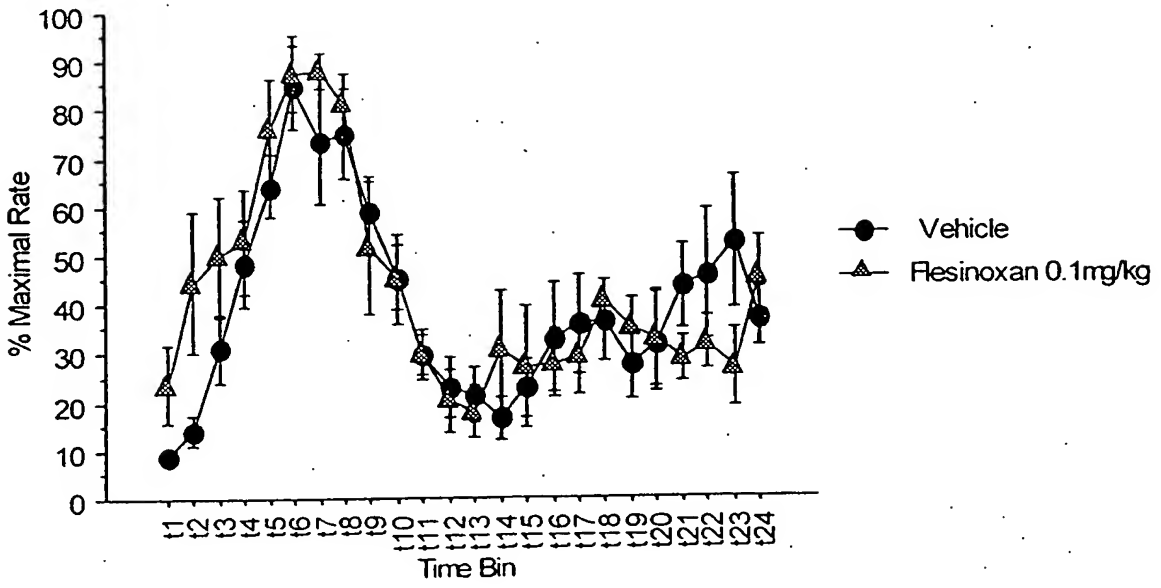


FIGURE 3

3A



3B

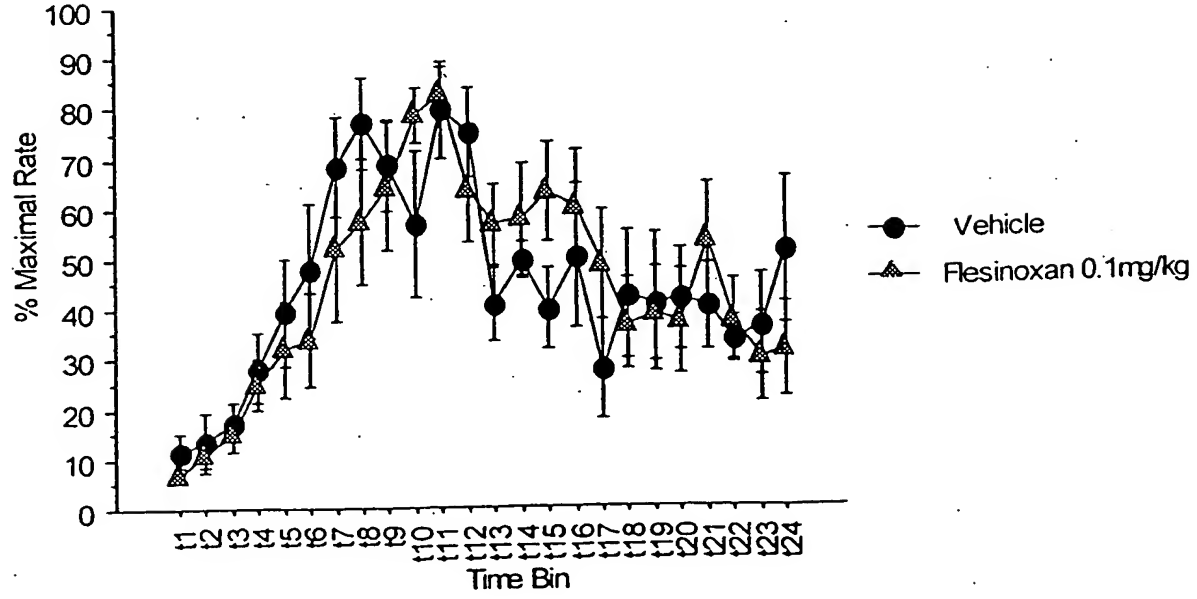
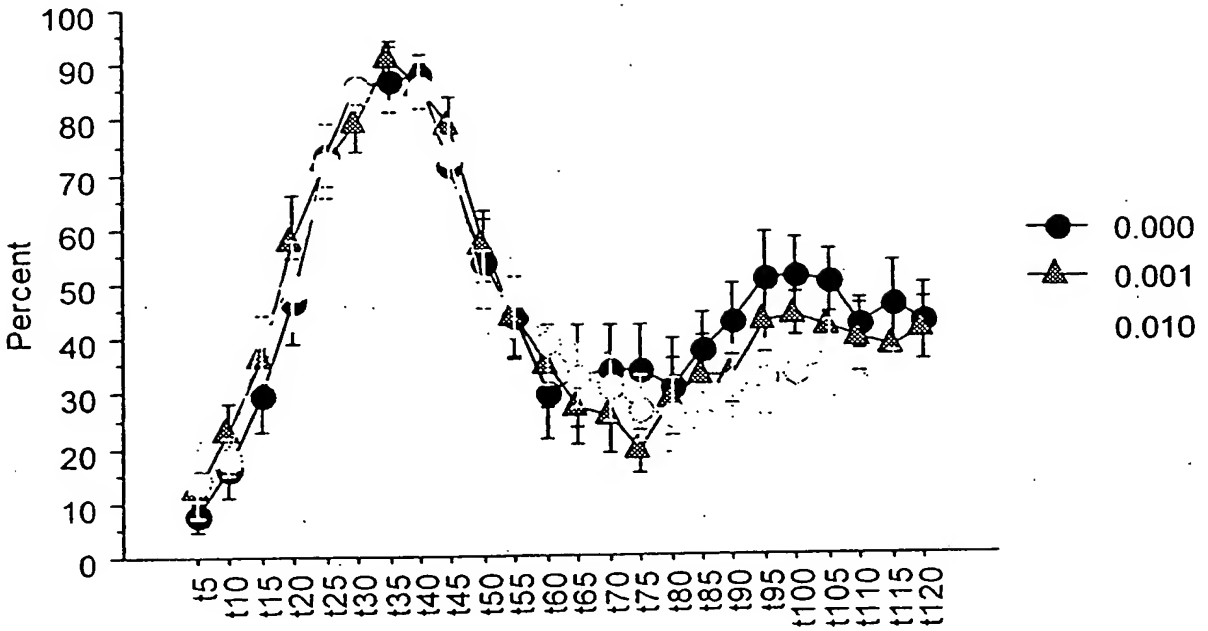


FIGURE 4

4A



4B

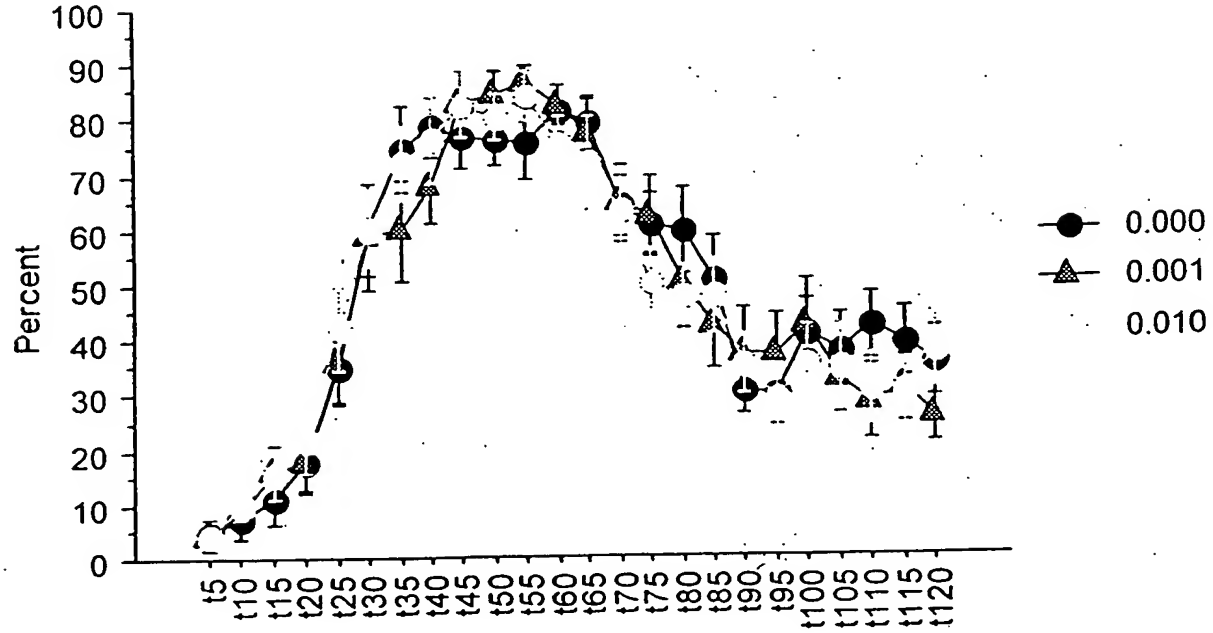
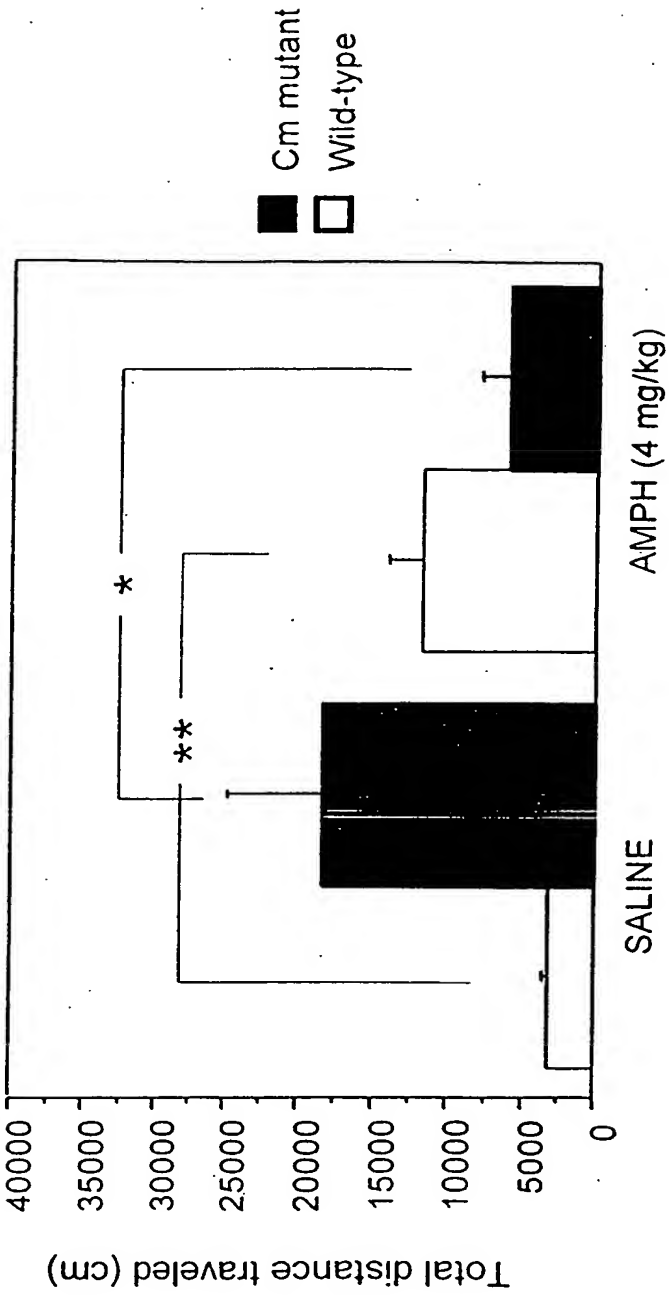
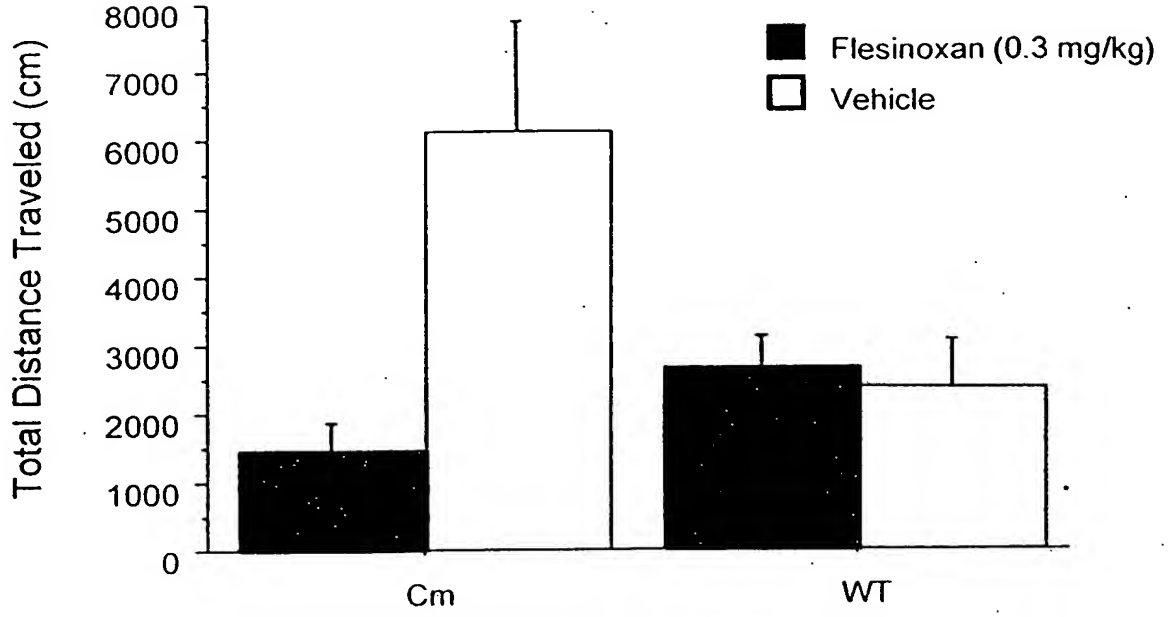


FIGURE 5


Cm mutant
Wild-type
Total distance traveled (cm)
40000
35000
30000
25000
20000
15000
10000
5000
0
SALINE
AMPH (4 mg/kg)
*
**

6A



6B

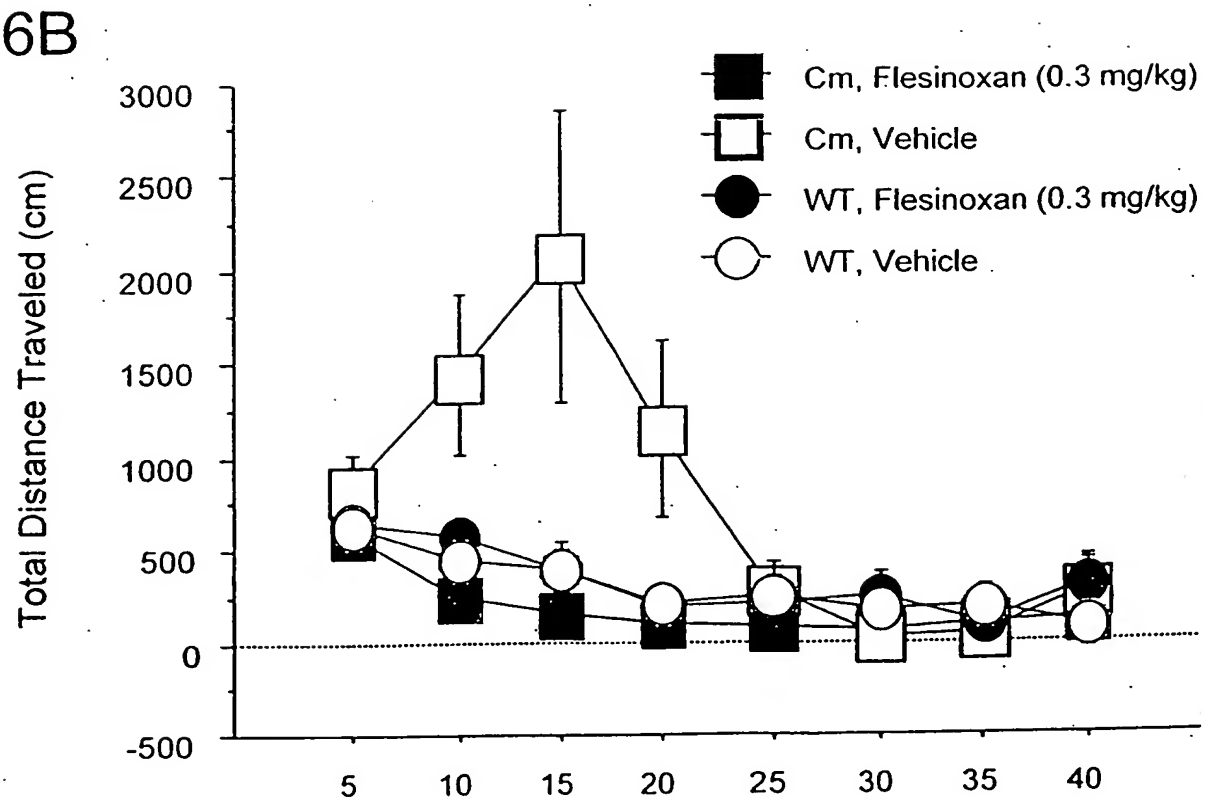


FIGURE 6

FIGURE 6

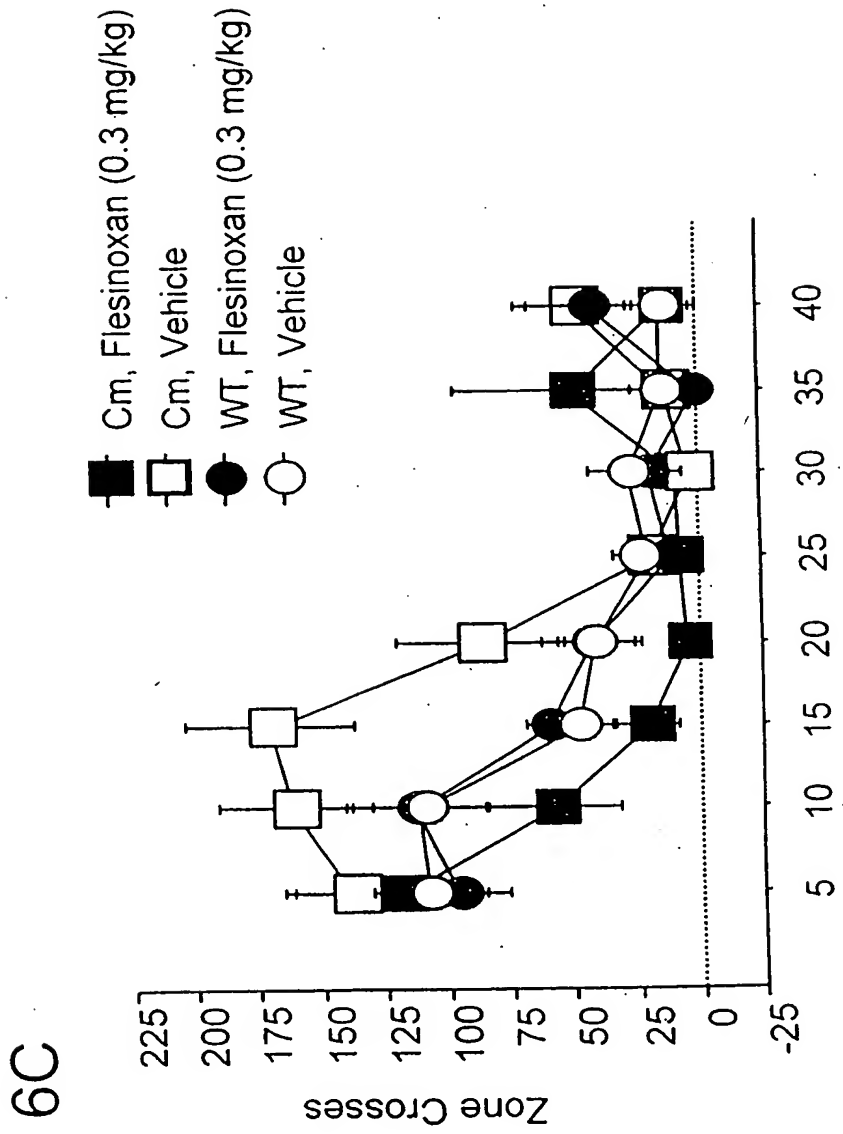
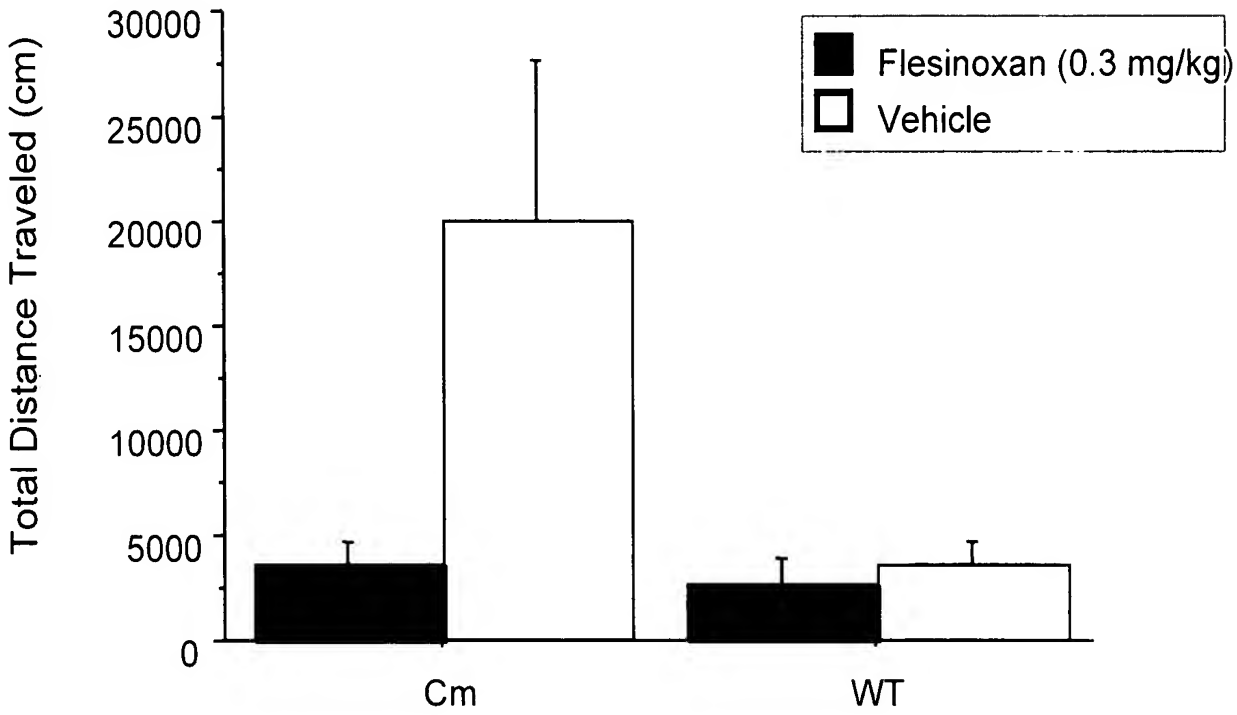

6C
Cm, Flesinoxan (0.3 mg/kg)
Cm, Vehicle
WT, Flesinoxan (0.3 mg/kg)
WT, Vehicle
Zone Crosses
225
200
175
150
125
100
75
50
25
0
-25
5
10
15
20
25
30
35
40

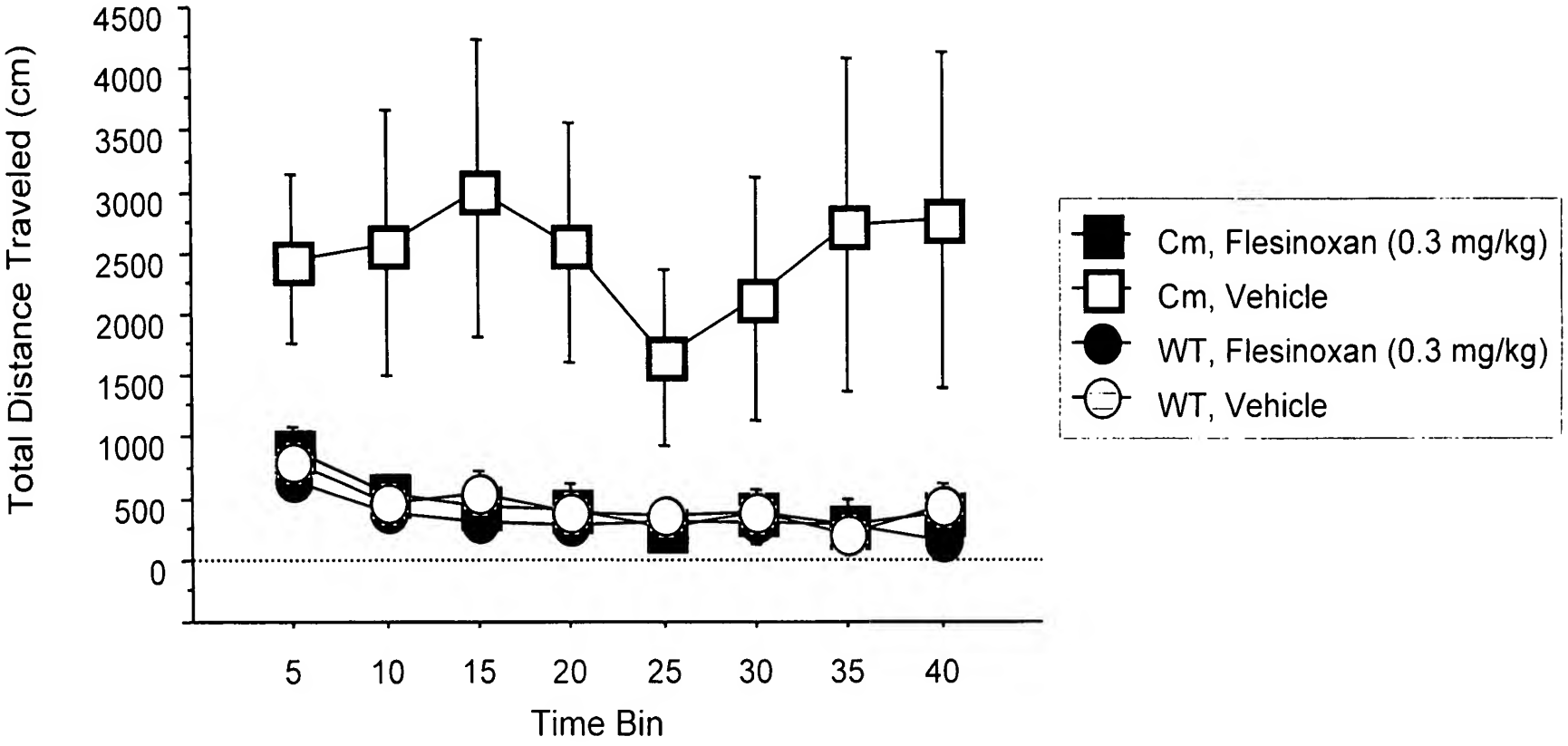
Figure 6D


Total Distance Traveled (cm)
30000
25000
20000
15000
10000
5000
0
Cm
WT
Flesinoxan (0.3 mg/kg)
Vehicle

ANOVA Table for Total Distance

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Genotype	1	705209589.402	705209589.402	4.186	.0486	4.186	.500
Treatment	1	707389135.119	707389135.119	4.198	.0482	4.198	.501
Genotype * Treatment	1	560538808.011	560538808.011	3.327	.0770	3.327	.411
Residual	34	5728531134.731	168486209.845				

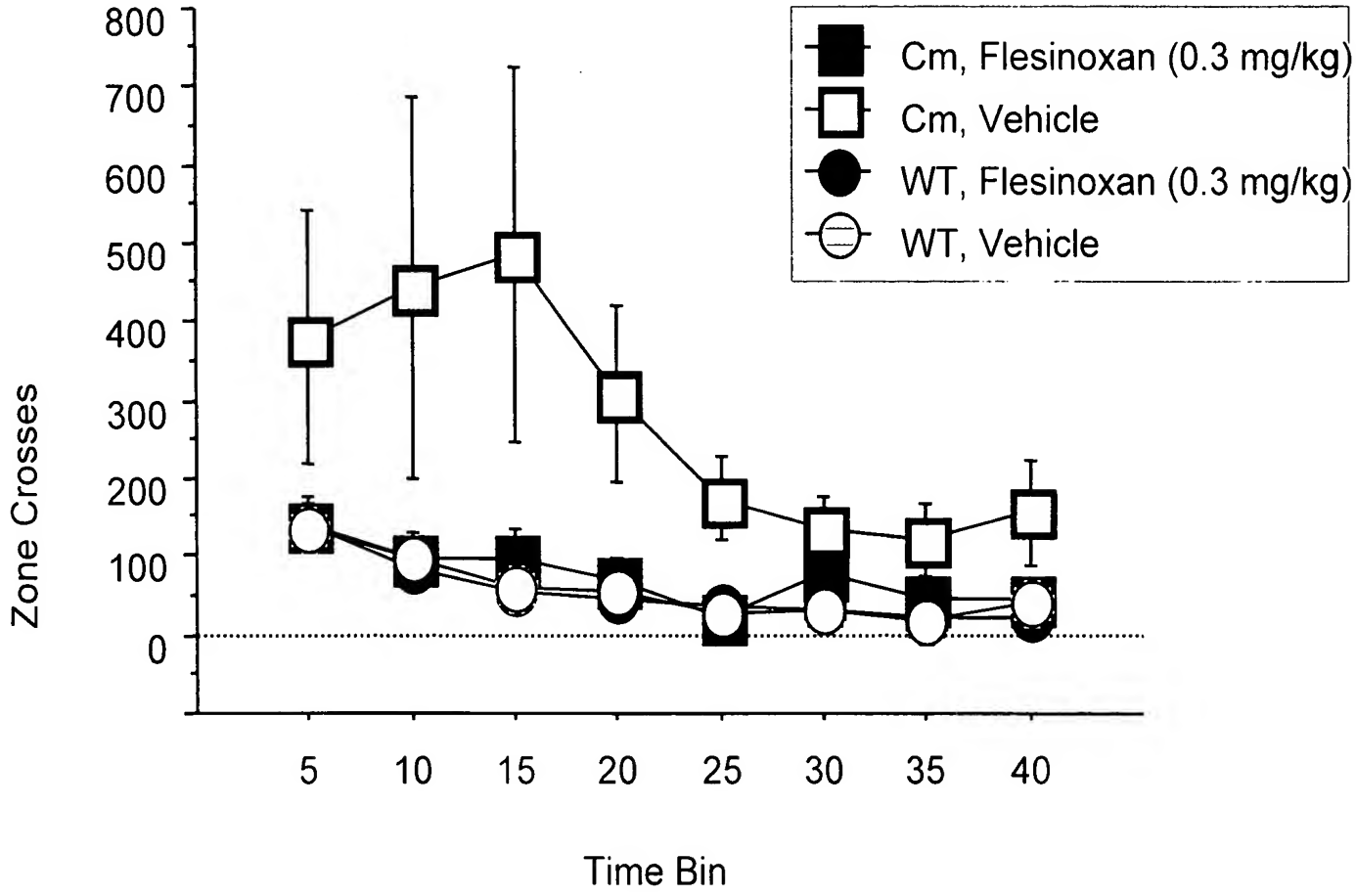
Figure 6E


Total Distance Traveled (cm)
4500
4000
3500
3000
2500
2000
1500
1000
500
0
5
10
15
20
25
30
35
40
Time Bin
Cm, Flesinoxan (0.3 mg/kg)
Cm, Vehicle
WT, Flesinoxan (0.3 mg/kg)
WT, Vehicle

ANOVA Table for Total Distance (cm)

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Genotype	1	88151198.658	88151198.658	4.186	.0486	4.186	.500
Treatment	1	88423641.870	88423641.870	4.198	.0482	4.198	.501
Genotype * Treatment	1	70067350.984	70067350.984	3.327	.0770	3.327	.411
Subject(Group)	34	716066391.641	21060776.225				
Time Bin	7	7744570.809	1106367.258	1.644	.1239	11.506	.670
Time Bin * Genotype	7	3625712.880	517958.983	.770	.6134	5.387	.324
Time Bin * Treatment	7	3710881.026	530125.861	.788	.5983	5.513	.332
Time Bin * Genotype * Treatment	7	3068643.301	438377.614	.651	.7131	4.559	.275
Time Bin * Subject(Group)	238	160193332.192	673081.228				

Figure 6F


800
700
600
500
400
300
200
100
0
Zone Crosses
5
10
15
20
25
30
35
40
Time Bin
Cm, Flesinoxan (0.3 mg/kg)
Cm, Vehicle
WT, Flesinoxan (0.3 mg/kg)
WT, Vehicle

ANOVA Table for Zone Crosses

	DF	Sum of Squares	Mean Square	F-Value	P-Value	Lambda	Power
Genotype	1	1074608.005	1074608.005	4.917	.0334	4.917	.570
Treatment	1	785810.321	785810.321	3.596	.0665	3.596	.439
Genotype * Treatment	1	748827.284	748827.284	3.427	.0729	3.427	.421
Subject(Group)	34	7430259.500	218537.044				
Time Bin	7	983747.567	140535.367	4.027	.0003	28.191	.989
Time Bin * Genotype	7	258272.518	36896.074	1.057	.3919	7.401	.446
Time Bin * Treatment	7	265808.307	37972.615	1.088	.3715	7.617	.459
Time Bin * Genotype * Treatment	7	246326.725	35189.532	1.008	.4259	7.059	.426
Time Bin * Subject(Group)	238	8305336.389	34896.371				

FIGURE 7

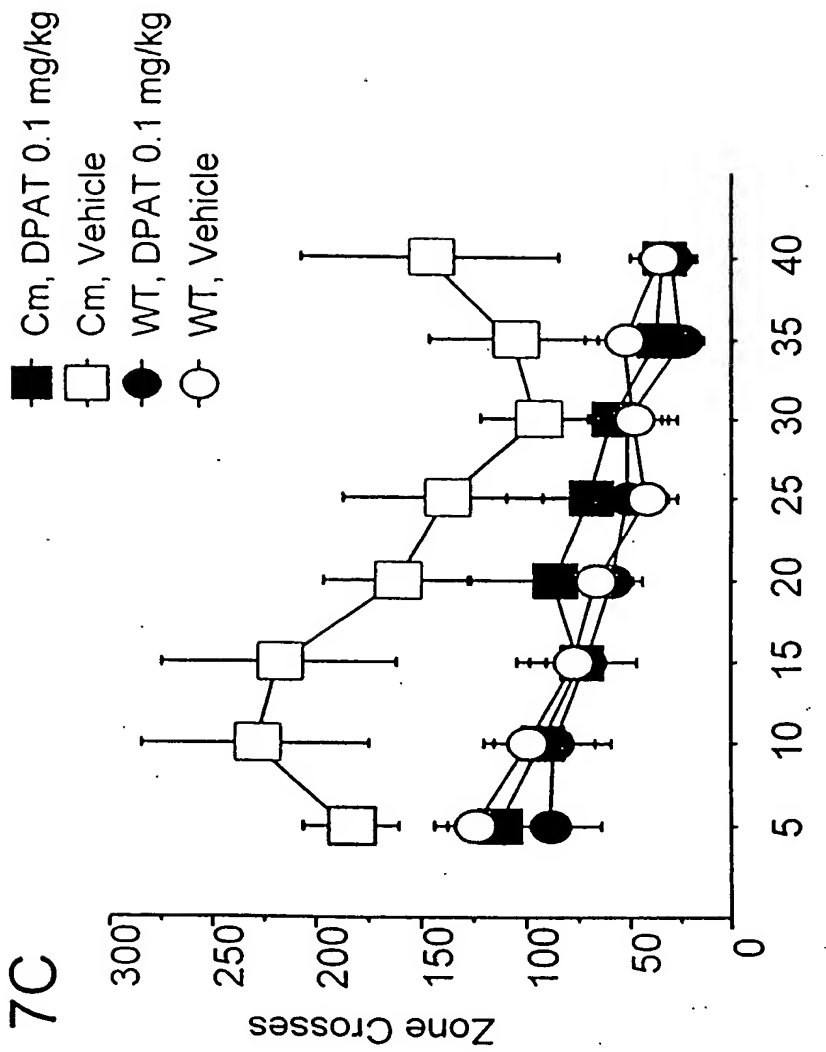
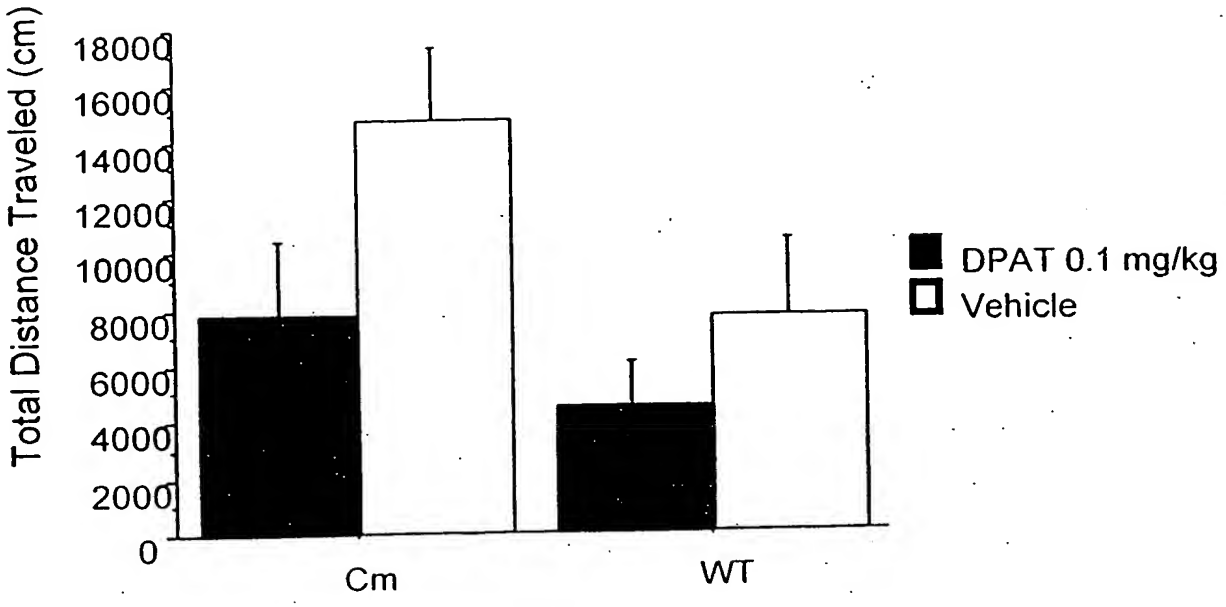
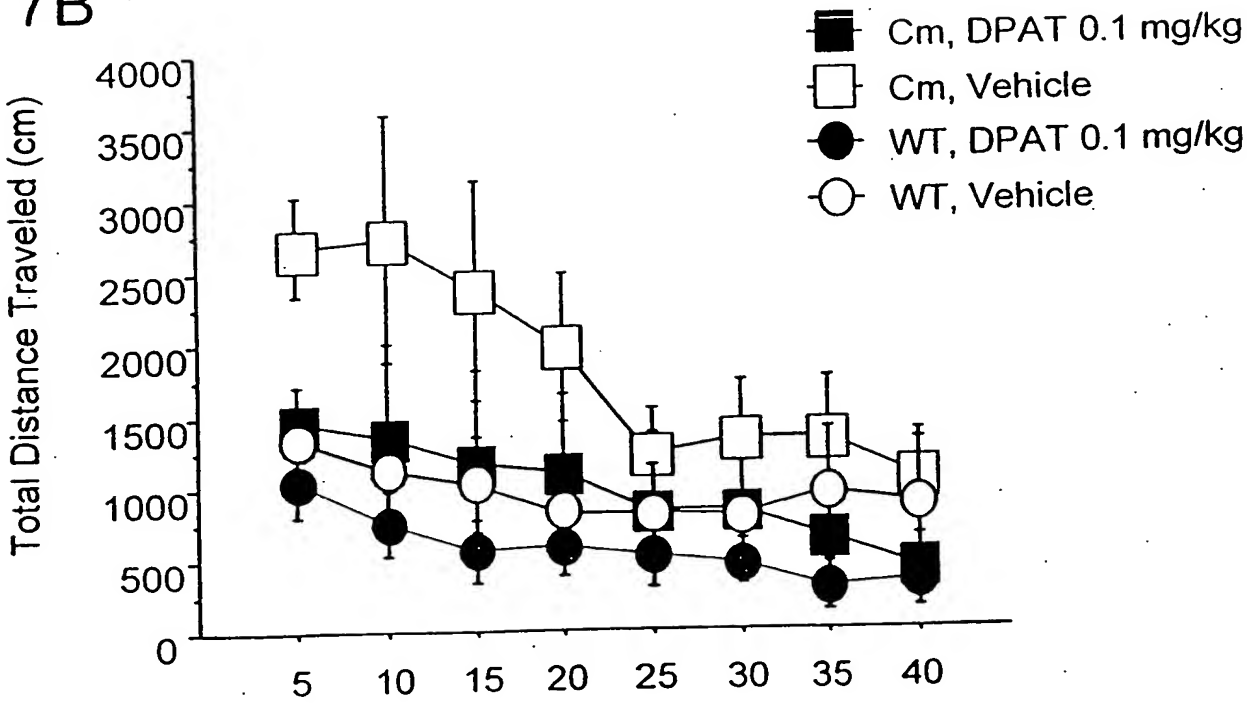

7C
Cm, DPAT 0.1 mg/kg
Cm, Vehicle
WT, DPAT 0.1 mg/kg
WT, Vehicle
Zone Crosses
300
250
200
150
100
50
0
5
10
15
20
25
30
35
40

FIGURE 7

7A



7B